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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

VUONG, BACH Q

ART UNIT PAPER NUMBER

2653

DATE MAILED: 12/24/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/556,620

Applicant(s)

LEE ET AL.

Examiner

Bach Q Vuong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09/30/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-25 and 35 is/are allowed.
- 6) ☒ Claim(s) 1-9, 13-22, 26, 27 and 29-32 is/are rejected.
- 7) ☒ Claim(s) 10, 12, 28, 33 and 34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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This communication is responsive to an amendment filed on 09/30/2003

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 11, 13-21, 26, 27 and 29-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Mine (US 5,966,358).

Mine, according to Figs. 1-3, shows an optical disk drive comprising all features of the claimed invention as indicated below:

Regarding claim 1, see Figs. 2 and 3 which show a an optical recording medium to which user data is written and rewritten comprising: basic recording units (see recording medium in Fig. 2) in which the user data are seamlessly connected; and a predetermined area in which information, which is related to a defective area occurring before the user data is recorded on the optical recording medium or while the optical recording medium is being used, is recorded; wherein a defective area data pattern is recorded in the defective area during the recording of the user data for seamless recording (see column 4 , line 43 through column 6, line 58).

Regarding claim 2, see the respective disclosure of Fig. 2 which show the optical recording medium further comprising a data identifier (DID) area or data recordable area in which a recording pattern defined by a predetermined rule is recorded to detect a defective

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area before the user data is recorded on the optical recording medium, and while the user data is being recorded, a physical sector number is recorded in the data identifier area.

Regarding claim 3, see the respective disclosure of Fig. 2 which shows the optical recording medium wherein the data identifier area stores information for discriminating the user data from the defective area data pattern recorded in a corresponding sector of the optical recording medium.

Regarding 4, see Figs. 2 and 3 which show the optical recording medium further comprising a data identifier (DID area) or data recordable area to detect a defective area before the user data user area is recorded on the optical recording medium, and while the user data is being recorded, a logical sector number which is not assigned to the detective area is recorded in the data identifier area.

Regarding claim 5, see Figs. 2 and 3 which show the optical recording medium wherein the data identifier area stores information for discriminating the user data from the defective area data pattern recorded in a corresponding sector of the optical recording medium.

Regarding claim 6, see Fig. 2 which shows the optical recording medium wherein the defective area data pattern is dummy data (see column 6, lines 25-58).

Regarding claim 7, see Fig. 2 which shows the optical recording medium wherein the defective area data pattern is the same as data in the part of an area preceding or succeeding the defective area.

Regarding claim 8, see Fig. 2 which shows the optical recording medium wherein the defective area data pattern is defined by a drive manufacturing company.

Regarding claim 11, see Fig. 2 and 3 which show a method of processing a defective area in an optical recording medium to which user data is written and rewritten and in which basic recording units (see recording medium in Fig. 2) are seamlessly connected, the method comprising: (a) recording a defective area data pattern in the defective area on the optical recording medium to enable seamless recording of the user data during recording of the user data (see column 4, line 43 through column 6, line 58).

Regarding claim 13, see the rejection applied to claim 6.

Regarding claim 14, see the rejection applied to claim 7.

Regarding claim 15, see the rejection applied to claim 8.

Regarding claim 16, see Figs. 2 and 3 which shows a method of processing a defective area in an optical recording medium further comprising: (b) detecting the defective area occurring before the user data is recorded on the optical recording medium or while the optical recording medium is being used; and (c) recording information related to the detected defective area in a predetermined area on the optical recording medium. (see the rejection applied to claim 2)

Regarding claim 17, see the respective disclosure of Figs. 2 and 3 which shows a method of processing a defective area in an optical recording medium wherein the step (b) comprises detecting the defective area before the user data is recorded on the optical recording medium, by certification, wherein the certification is performed by recording a recording pattern defined by a predetermined rule in a data identifier (DID) area or data recordable area of the optical recording medium.

Regarding claim 18, see Fig. 2 which shows a method of processing a defective area in an optical recording medium wherein the step (a) comprises recording a physical sector

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number in the data identifier area during the recording of the user data (see the rejection applied to claim 2).

Regarding claim 19, see the rejection applied to claim 3.

Regarding claim 20, see Fig. 2-3 which shows a method of processing a defective area in an optical recording medium wherein comprises recording a logical sector number which is not assigned to the defective area in the data identifier area (see the rejection applied to claim 4).

Regarding claim 21, see Figs. 2-3 which shows a method of processing a defective area in an optical recording medium further comprising storing information for discriminating the user data from the defective area data pattern in a corresponding sector in the data identifier area (see the rejection 3 and 5).

Regarding claims 26 and 27, see Figs. 2 and 3 which show an optical recording to which user data is written and rewritten comprising: basic recording units (see recording medium in Fig. 2 for details) in which the user data are seamlessly connected, and including a defective area; a predetermined area which stores information related to a defective area occurring before the user data is recorded or while the optical recording medium is being used; and a defective area data pattern recorded in the defective area without using a linking scheme (see column 4, line 43 through column 6, line 58).

Regarding claim 29, see the rejection applied to claim 6.

Regarding claim 30, see the rejection applied to claim 7.

Regarding claim 31, see the rejection applied to claim 8.

Regarding claim 32, see the rejection applied to claim 26.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 22 are rejected under U.S.C. 103(a) as being unpatentable over Mine (US 5,966,358) in view of Hisatomi et al. (US 6,546,192).

Mine, according to Figs. 2 and 3, shows all the features of the instant claimed invention (see the rejections above). Mine et al. do not disclose that the recording medium is digital versatile recordable (DVD-R) or digital versatile disc rewritable (DVD-RW). Hisatomi et al., according to Figs. 1-3, shows the recording medium on which information related to the defective area is stored in the a recording management data area is a digital versatile disc recordable (DVD-R). It would have been obvious to one of ordinary skills in the art at the time the invention made to incorporate an optical recording medium of Mine by using DVD-R on which defective are stored management data area as taught by Hisatomi et al. in order to improve of recording data in a different type of disc.

Allowable Subject Matter

Claims 10, 12, 28, 33 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 23-25 and 35 are allowed.

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Response To Arguments


Applicant's arguments with respect to claimed invention have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bach Q Vuong whose telephone number is (703) 305-7355. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

BV
December 19, 2003


THANG V. TRAN
PRIMARY EXAMINER